



Emerging approaches, challenges and opportunities in life cycle assessment

Author(s): Hellweg S, Canals LMI
Year: 2014
Journal: Science. 344 (6188): 1109-1113

Abstract:

In the modern economy, international value chains - production, use, and disposal of goods - have global environmental impacts. Life Cycle Assessment (LCA) aims to track these impacts and assess them from a systems perspective, identifying strategies for improvement without burden shifting. We review recent developments in LCA, including existing and emerging applications aimed at supporting environmentally informed decisions in policy-making, product development and procurement, and consumer choices. LCA constitutes a viable screening tool that can pinpoint environmental hotspots in complex value chains, but we also caution that completeness in scope comes at the price of simplifications and uncertainties. Future advances of LCA in enhancing regional detail and accuracy as well as broadening the assessment to economic and social aspects will make it more relevant for producers and consumers alike.

Source: <http://dx.doi.org/10.1126/science.1248361>

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Unspecified Exposure

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Co-Benefit/Co-Harm (Adaption/Mitigation):

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact:

Climate Change and Human Health Literature Portal

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Mitigation

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified